**Helpful Hint—How to Change the UTM Zone of the Data Frame in ArcMap**

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| **Applies to Version:** | Toolkit 2004/ArcMap |
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**PURPOSE**

Washington State has two UTM Zones (Zones 10 & 11).  Each ArcMap project can only have one of the two UTM Zones assigned to the project's Data Frame at any one time.    Similarly, all of the geodata on the Service Center servers has been created in one of these two zones.

In **Arcview**, if data from both UTM Zones were added to an Arcview project the data would not overlay correctly in the View, even if the data were from counties next to each other.  However, **ArcMap** has the ability to "**project on-the-fly**".  This means that if data from both UTM Zones were added to an ArcMap project, the data WOULD overlay correctly, as long as the data being added had a "projection file" assigned to it.  The projection files for all of the geospatial data on your servers will already have been assigned.

Shapefiles you make in Toolkit won't have a projection file.  This is not something to be concerned about in most cases.   If you find you are having a problem with data overlaying correctly, call your State Office Toolkit support contacts.

There might be a legitimate need to change the UTM Zone of a Data Frame in ArcMap.  The wrong UTM Zone may have been assigned to the ArcMap project.  There might be data without a projection file that is not appearing in the correct place.  Or the coordinates seen in the lower right-hand corner of the ArcMap window might be incorrect.   This Helpful Hint will show how changing the UTM Zone can be easily accomplished.

**INSTRUCTIONS**

The ArcMap project should already be opened.

Notice that the state outline in this ArcMap project is sort of tilted downwards to the right. The Data Frame of this ArcMap project is in UTM Zone 11, therefore the state outline will be tilted in that direction.

In the ArcMap project at the top of the Legend window, right-click on the Data Frame name (in this case it is called "Layers") and select "Properties".
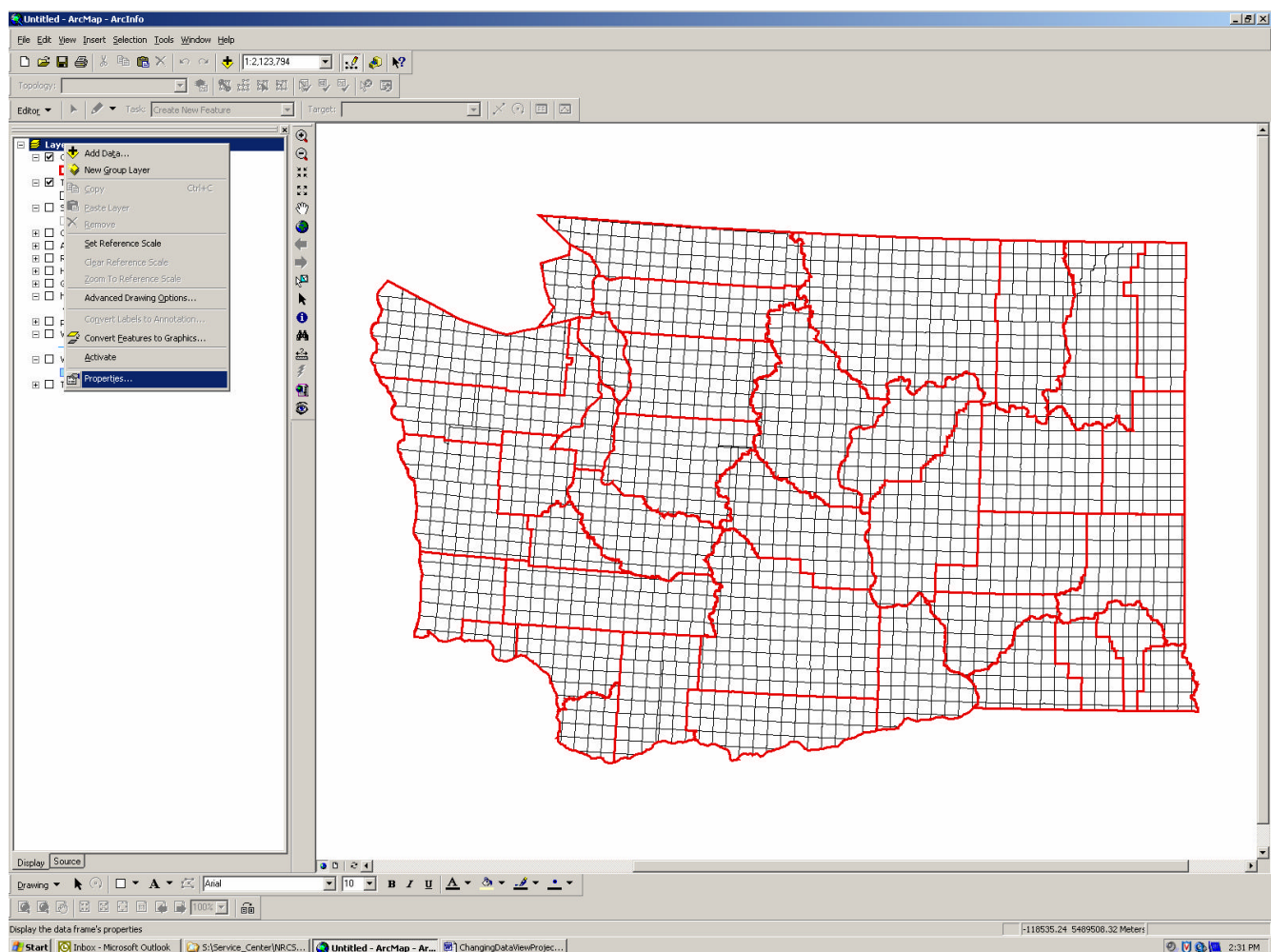
The Data Frame Properties window appears.  Click on the "Coordinate System" tab.  In this example, the Data Frame currently has the coordinate system assigned as "NAD 1983 UTM Zone 11N".
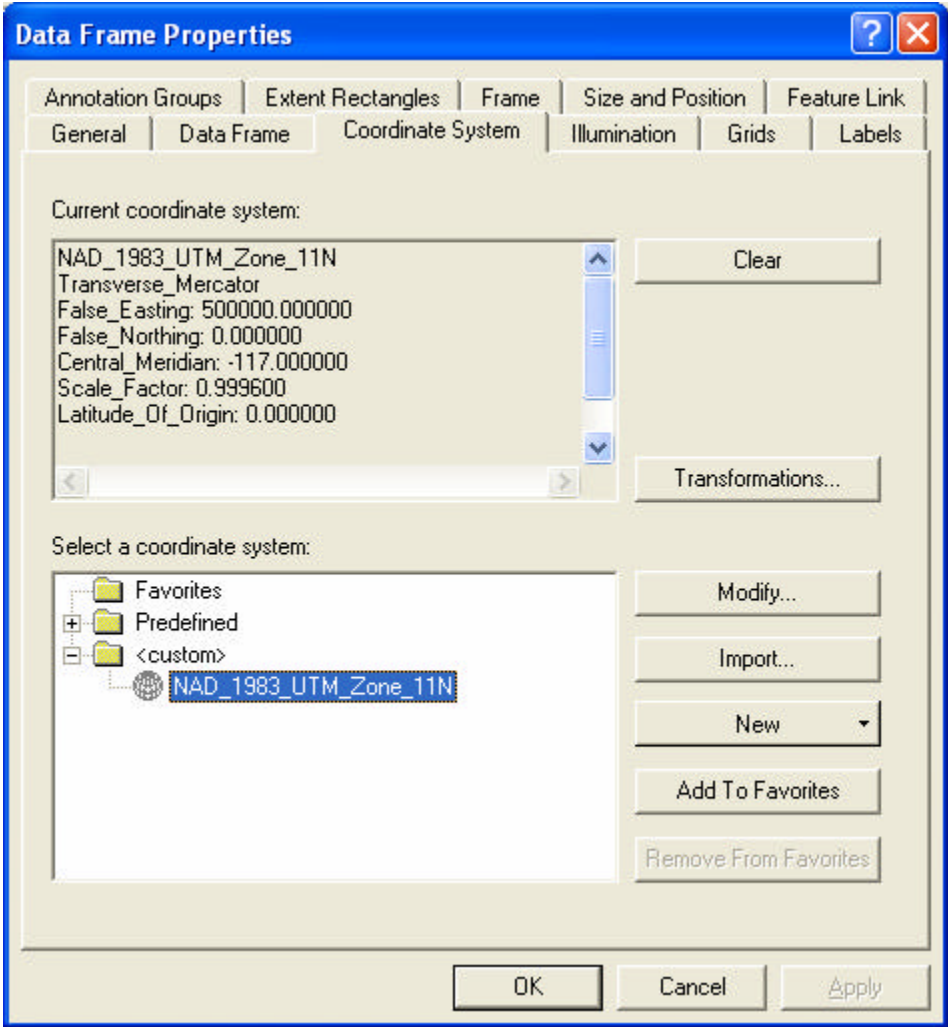
It has been previously determined that the projection needs to be changed from UTM Zone 11 to UTM Zone 10.   To do this, open up the "Predefined" directory, then open up the "Projected Coordinate Systems" directory, and then the "UTM" directory as shown below.
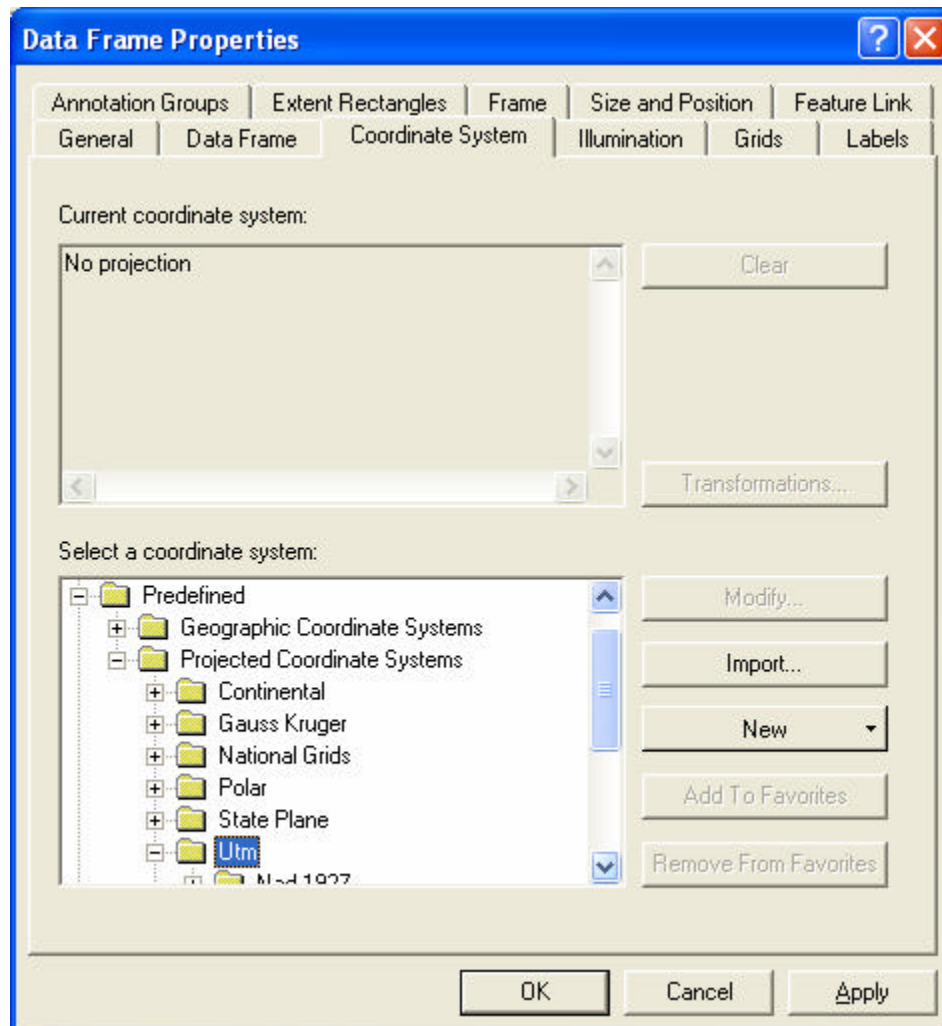
Now open up the "Nad 1983" directory and select the UTM Zone you want to change the Data Frame into, in this case it will be "NAD 1983 UTM Zone 10N".
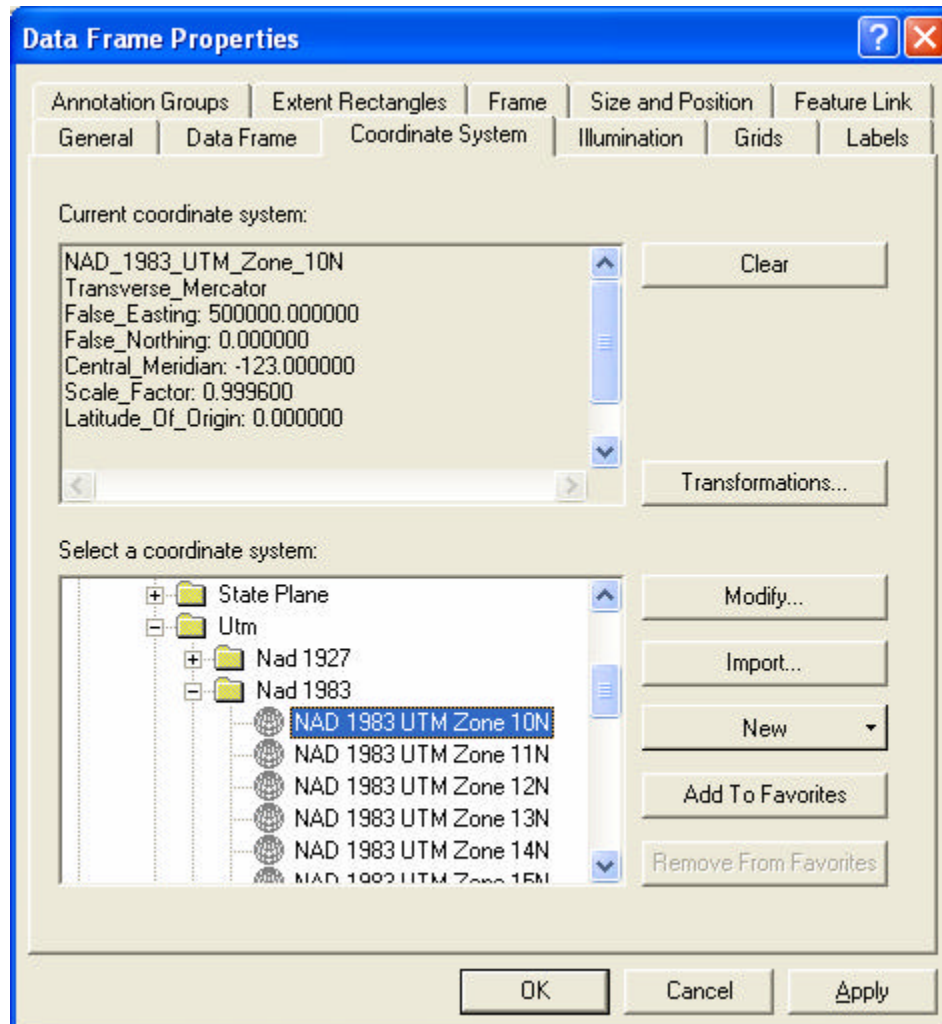


Click OK.  You might encounter the message below.  If so, click Yes.
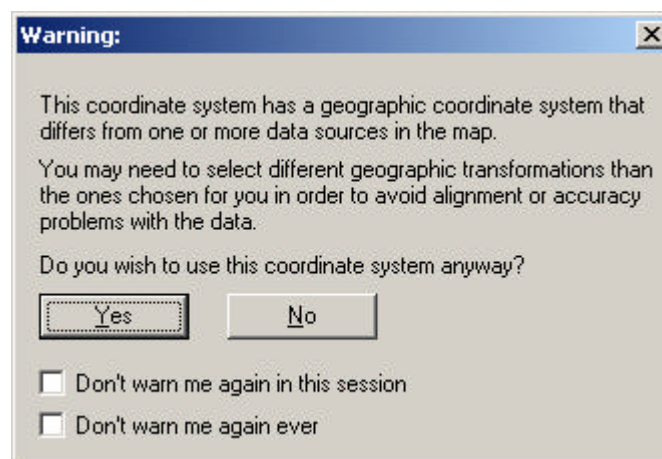
The Data Frame coordinate system has been changed from UTM Zone 11 to UTM Zone 10.  Notice that the state outline is now tilted upwards to the right.  Now that the Data Frame has been changed to UTM Zone 10, the state outline is tilted in that direction.
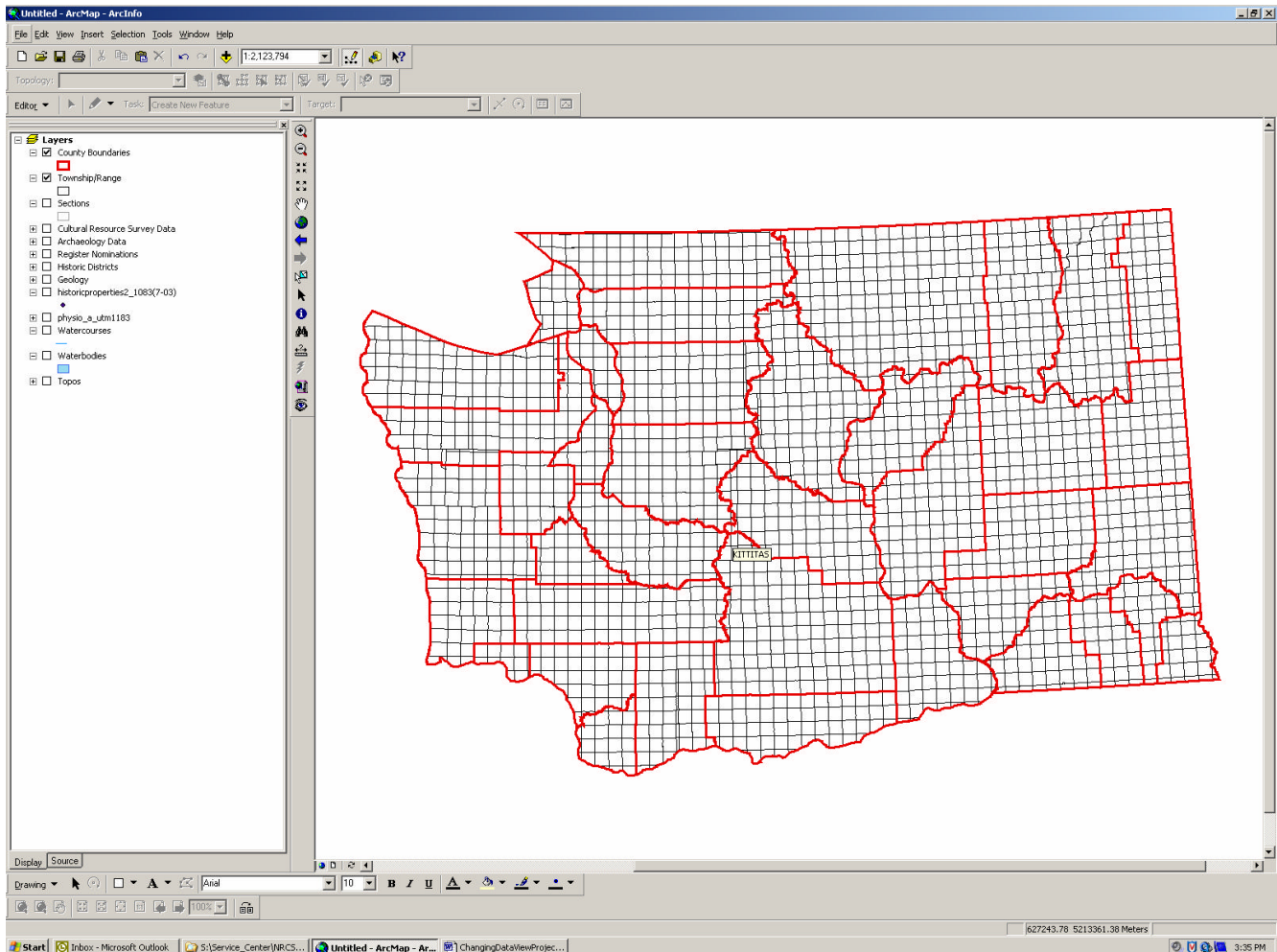


See if the problem has been fixed.  Does the data show up in the right place?  Are the coordinates in the lower-right corner correct?

The Data Frame can be left in this UTM Zone as necessary.  It can also be changed back to the other UTM Zone by following the same process.  Save your project when you are done.